

Amendments to the Claims

Please cancel claims 1-18 without prejudice, and add new claims 19-35 as follows:

Claims 1-18. (Canceled)

Claim 19. (New) A mandrel for forming a printhead nozzle plate, said mandrel comprising:

a glass substrate having a top surface with a plurality of glass-formed raised features extending above said top surface and spaced apart from each other;
a metal layer having a first portion formed above said top surface and a second portion formed above said raised features, with said first portion connected with said second portion; and
a dielectric layer formed above said second portion of said metal layer.

Claim 20. (New) The mandrel of claim 19 wherein said first portion of said metal layer is integral with said second portion of said metal layer.

Claim 21. (New) The mandrel of claim 19 wherein said first portion and said second portion of said metal layer conform to the shape of said glass substrate.

Claim 22. (New) The mandrel of claim 21 wherein said first portion and said second portion of said metal layer are directly adjacent to said glass substrate.

Claim 23. (New) The mandrel of claim 19 wherein said dielectric layer conforms to the shape of the glass-formed raised features.

Claim 24. (New) The mandrel of claim 21 wherein said dielectric layer is directly adjacent to said second portion of said metal layer.

Claim 25. (New) The mandrel of claim 19 wherein said glass-formed raised features include pillars having a top and side walls, and wherein said second portion of said metal layer

covers said top and said side walls of said pillars.

Claim 26. (New) The mandrel of claim 19 wherein said glass-formed raised features include pillars having a top and side walls, and where said dielectric layer covers said top and said side walls of said pillars.

Claim 27. (New) The mandrel of claim 19 wherein said dielectric layer comprises silicon carbide.

Claim 28. (New) The mandrel of claim 19 wherein said dielectric layer has a thickness in the approximate range of 3500 to 4000 angstroms.

Claim 29. (New) The mandrel of claim 19 wherein said metal layer has a thickness in the approximate range of 0.5 to 1.0 microns.

Claim 30. (New) The mandrel of claim 19 wherein said glass-formed raised features include pillars have a top, side walls, and a base, with a base diameter greater than a top diameter.

Claim 31. (New) The mandrel of claim 19 wherein said raised features correspond to a shape and position of respective nozzle features electroformed on said mandrel.

Claim 31. (New) The mandrel of claim 31 wherein said raised features are tapered to correspond to a shape and position of respective nozzle features electroformed on said mandrel, said nozzle features have an exit bore nozzle diameter smaller than a base nozzle diameter.

Claim 32. (New) A mandrel for electroforming an inkjet printhead nozzle plate, comprising:

a glass substrate having a top surface with a plurality of glass-formed raised pillars extending above said top surface and spaced apart from each other, said pillars each having a top

and side walls;

a metal layer having a first portion formed above said top surface and a second portion formed above said raised pillar features, with said first portion integral with said second portion; and

a dielectric layer formed above said second portion of said metal layer and covering said top and side walls of said raised pillar features.

Claim 33. (New) The mandrel of claim 32 wherein said metal layer is adjacent to said glass substrate, and said dielectric layer is adjacent to said second portion of said metal layer.

Claim 34. (New) The mandrel of claim 32 wherein said side walls of said raised pillar features are tapered from a smaller diameter top to a larger diameter base.

Claim 35. (New) The mandrel of claim 32 wherein said raised pillar features correspond to a shape and position of respective nozzle features electroformed on said mandrel, and where said mandrel is re-usable..